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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,979	04/07/2004	Sean Christopher Endler	81490 7114	9035
37123 7590 02/07/2008 FITCH EVEN TABIN & FLANNERY 120 SOUTH LASALLE SUITE 1600 CHICAGO, IL 60603			EXAMINER THERIAULT, STEVEN B	
			ART UNIT 2179	PAPER NUMBER
			MAIL DATE 02/07/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/820,979

Applicant(s)

ENDLER ET AL.

Examiner

Steven B. Theriault

Art Unit

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. This action is responsive to the following communications: Amendment filed 11/09/2007

This action is made Final.

2. Claims 1 -23 are pending in the case. Claims 1, 12, 13, 17, and 22 are the independent claims.

Claim Rejections - 35 USC § 103

3. **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. **Claims 1-23 are rejected under 35 USC 103(a) as being unpatentable over Fitzmaurice et al (hereinafter Fitzmaurice) U.S. Patent Publication No. 2004/0212617 issued Oct. 28, 2004**

and filed Dec. 31, 2003, in view of Kurtenbach et al. (hereinafter Kurtenbach) U.S. Patent No. 6618063 filed March 8, 1999.

In regard to **Independent claim 1**, Fitzmaurice teaches a method comprising:

- Detecting an input (page 1, Para 0020 and page 3, Para 0037-0043 and Figures 7-15).
Fitzmaurice teaches detecting a user's selection of a menu item.
- Defining a mark at a position relative to the input and displaying a first segment, the first segment comprising a first end positioned at the mark and a second end distant from the first end (Fitzmaurice Figure 8) Fitzmaurice shows a mark relative to the input by showing the line segment extending from the center mark. Fitzmaurice show a first segment that has a first position at the mark and a second distant from the first (See figure 10 and
- Displaying a plurality of selections (Fitzmaurice Figures 5-9 and 12-16). Fitzmaurice shows a plurality of selections.
- Detecting a location of the second end of the first segment relative to the plurality of selections (Fitzmaurice Figure 7-9) Fitzmaurice teaches detecting the location of the stylus in relation the next menu level options and shows the computer detects the second end of the second my making a selection (Shown in figure 9 and 10).
- Highlighting a particular selection of the plurality of selections when the second end of the first segment is within an area of the particular selection (Fitzmaurice figure 9 and 10).
Fitzmaurice teaches highlighting a particular selection when the user moves the stylus over the selection and where the second end of the line segment intersects with the selection to be highlighted (See Para 0034 and 0039)

- Selecting the particular selection based on the second end of the first segment being located within the area of the particular selection of the plurality of selections (Fitzmaurice Figures 7-9) Fitzmaurice shows selecting the function once the user has indicated through input to operate the menu function (See Para 0029).
- Fitzmaurice teaches a marker selection menu that will give a rotational effect on the interface as the user moves from selection to selection. For example, the user can select the center and then move to the east and before selecting they could move the stylus to the north position and the segment will rotate about the center input and then move to the north position (Fitzmaurice Figures 5-9 and Para 0037-0044).

Fitzmaurice does not expressly teach:

- Moving the second end of the first segment based on the input, the moving including rotating the first segment around the mark

However, Kurtenbach teaches a marking menu where the user can move the first segment around the mark. For example, Kurtenbach teaches a process of displaying a combination radial and linear menu where the menus can be selected via stroke or gesture of a pen touching the display surface. Kurtenbach shows an example (See figure 3 and 4 and column 3, lines 37-67 and column 4, lines 1-10) where the user can press the pen against a surface and highlight a menu, when they move the pen in angular section 46. The menu item 42 is selected. Then the user can change direction and rotate the pen and make a second selection stroke 50). Kurtenbach teaches the user can move the pen tip back to the center point 48 and draw another line to select another menu. In the Examiner opinion represents at least two ways to rotate a segment around a mark. The user can perform a stroke and then return to the mark and stroke again, each time turning the pen to go in another direction. Or, the user can perform a stroke. Kurtenbach shows that when a menu has a submenu then a new mark is made and the user continues from that new mark to select sub-menu items by

rotating the pen. Clearly, stroke 50 is rotated approx. 45 degrees from stroke 42. Kurtenbach and Fitzmaurice teach menus and selecting the menu's via an ink or stroke gesture by the user. The both teach a marking menu and they both teach presenting menus when the user performs a stroke in a certain area on the screen.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Kurtenbach and Fitzmaurice in front of them, to modify the menu of Fitzmaurice to move the segment around the mark by rotating the ink or stroke gesture on the end of the line segment. The motivation to combine Fitzmaurice and Kurtenbach comes from the suggestion in Kurtenbach to allow for rapid selection of menu items using a marking or stroke pattern (See column 1, lines 55-60).

With respect to **dependent claim 2**, Fitzmaurice teaches the method further comprising displaying a plurality of sub-selections corresponding to the particular selection (Fitzmaurice figures 34-36b and Para 0065-0069) Fitzmaurice displays a plurality of sub-selections that can be displayed on the device.

With respect to **dependent claim 3**, Fitzmaurice teaches the method further comprising highlighting a particular sub-selection from the plurality of sub-selections when a second segment is within an area of the particular sub-selection (Fitzmaurice Para 0072) Easty teaches the sub-selection rock is highlighted when chosen by the user (See Para 0034 and 0039).

With respect to **dependent claim 4**, Fitzmaurice teaches the method the plurality of selections corresponds with a function (Para 0029).

With respect to **dependent claim 5**, Fitzmaurice teaches the method wherein the function is one of a save function, a print function, a play function, and a meeting schedule function

(Fitzmaurice Figures 29 and Para 0060).

With respect to **dependent claim 6**, Fitzmaurice teaches the method the plurality of selections corresponds with content (Fitzmaurice Para 0045 and Para 0034) Fitzmaurice teaches the normal file commands can also be on the menu allowing the user to display files that are content on the menu.

With respect to **dependent claim 7**, Fitzmaurice teaches the method wherein the content is one of an audio content, a video content, a document, and a graphic (Fitzmaurice Para 0034). Fitzmaurice teaches the process of displaying files for a drawing tablet where the graphics are bitmaps.

With respect to **dependent claim 8**, Fitzmaurice teaches the method wherein the input is initiated through a pointing device (Fitzmaurice Para 0033).

With respect to **dependent claim 9**, Fitzmaurice teaches the method wherein the input is initiated through a touch screen (Fitzmaurice Para 0033).

With respect to **dependent claim 10**, Fitzmaurice teaches the method wherein the area of the particular selection is defined as an area closer to the particular selection compared to other selections (Figures 17-26). Fitzmaurice shows a variety of configurations where some selections are closer than others.

With respect to **dependent claim 11**, Fitzmaurice teaches the method wherein the area of the particular selection is defined as an area over the particular selection (Fitzmaurice figures 30a – 30b and Para 0061). Fitzmaurice teaches the selection area can be extended to aide

the user in selection that is over the selection area.

In regard to **Independent claim 12**, claim 12 reflects the system comprising computer readable instructions used for performing the method steps as claimed in claim 1 and is rejected along the same rationale.

In regard to **Independent claim 13**, Fitzmaurice teaches a method comprising:

- Detecting an input (page 1, Para 0020 and page 3, Para 0037-0043 and Figures 7-15). Fitzmaurice teaches detecting a user's selection of a menu item.
- Displaying a plurality of selections (Fitzmaurice Figures 5-9 and 12-16). Fitzmaurice shows a plurality of selections.
- Displaying a first segment comprising a first end and second end distant from the first end, the second end being rotationally moveable about the first end (Fitzmaurice Figures 5-9 and Para 0037-0044). Fitzmaurice teaches a marker selection menu that will give a rotational effect on the interface as the user moves from selection to selection. For example, the user can select the center and then move to the east and before selecting they could move the stylus to the north position and the segment will rotate about the center input and then move to the north position.
- Detecting the first segment within an area of a particular selection from the plurality of selections (Fitzmaurice Figures 5-9) Fitzmaurice shows the system detecting the segment in the area of the selections by showing the line has crossed the selection as shown in figure 10.
- Highlighting the particular selection based on the first segment located within the area of the particular selection (Fitzmaurice figure 9 and 10). Fitzmaurice teaches highlighting a particular selection when the user moves the stylus over the selection and where the

second end of the line segment intersects with the selection to be highlighted (See Para 0034 and 0039)

- Displaying a plurality of sub-selections corresponding to the particular selection (Fitzmaurice figure 5-9) Fitzmaurice displays a plurality of sub-selections corresponding to the first selection.

Fitzmaurice does not expressly teach:

- Moving the second end of the first segment based on the input, the moving including rotating the first segment around a static location of the first end;

However, Kurtenbach teaches a marking menu where the user can move the first segment around the mark, where the first end can be statically set to a location (See 44 and 48). For example, Kurtenbach teaches a process of displaying a combination radial and linear menu where the menus can be selected via stroke or gesture of a pen touching the display surface. Kurtenbach shows an example (See figure 3 and 4 and column 3, lines 37-67 and column 4, lines 1-10) where the user can press the pen against a surface and highlight a menu, when they move the pen in angular section 46. The menu item 42 is selected. Then the user can change direction and rotate the pen and make a second selection stroke 50). Kurtenbach teaches the user can move the pen tip back to the center point 48 and draw another line to select another menu. In the Examiner opinion represents at least two ways to rotate a segment around a mark. The user can perform a stroke and then return to the mark and stroke again, each time turning the pen to go in another direction. Or, the user can perform a stroke. Kurtenbach shows that when a menu has a submenu then a new mark is made and the user continues from that new mark to select sub-menu items by rotating the pen. Clearly, stroke 50 is rotated approx. 45 degrees from stroke 42. Kurtenbach and Fitzmaurice teach menus and selecting the menu's via an ink or stroke gesture by the user. The both teach a marking menu and they both teach presenting menus when the user performs a stroke in a certain area on the screen.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Kurtenbach and Fitzmaurice in front of them, to modify the menu of Fitzmaurice to move the segment around the mark by rotating the ink or stroke gesture on the end of the line segment. The motivation to combine Fitzmaurice and Kurtenbach comes from the suggestion in Kurtenbach to allow for rapid selection of menu items using a marking or stroke pattern (See column 1, lines 55-60).

With respect to **dependent claim 14**, Fitzmaurice teaches the method further comprising selecting the particular selection based, in part, on the first segment within the area of the particular selection (Fitzmaurice Figure 9 and 10).

With respect to **dependent claim 15**, Fitzmaurice teaches the method further comprising highlighting a particular sub-selection from the plurality of sub-selections when a second segment is within an area of the particular sub-selection, wherein the second segment comprises a first end and second distant end from the first end with first and second segment being positioned at the second end of the first segment (Fitzmaurice Para 0072) teaches the sub-selection rock is highlighted when chosen by the user (See Para 0034 and 0039).

Fitzmaurice also shows a plurality of configurations where the selection segment extends from the first menu selection to the second and subsequent menu selections (See figures 36a and 36B).

With respect to **dependent claim 16**, Fitzmaurice teaches the method further comprising rotating the second end of the segment over the plurality of sub-selections, where the second end of the second segment is rotationally moveable about the second end of the first segment (Fitzmaurice Para 0065 and Figures 5-9). Fitzmaurice teaches that the user makes a stroke movement on the display after touching a first menu item. Then the second level menu is shown to the user and the user by way of a selection stroke chooses the menu. The user has options for each level and as in the first menu selection the stroke path will be rotated from the selection point at each level entry point.

In regard to **Independent claim 17**, Fitzmaurice teaches a system, comprising:

- An input detection module to detect an input through an input device (page 1, Para 0020 and page 3, Para 0037-0043 and Figures 7-15). Fitzmaurice teaches detecting a user's selection of a menu item.

- A render module to render images for displaying a plurality of selections, a mark at a position relative to the input and a segment having a first end positioned at the mark and a second end distant from the first end, the segment controlled by the input and used for selecting a particular selection from the plurality of selections, the segment being rotateable around the mark wherein the render module selectively highlights the particular selection based on the input and the location of second end of the segment (Fitzmaurice Figures 5-9 and Para 0034-0045 and Para 0072). Fitzmaurice teaches a line segment is placed on the interface when the user place a stroke input on the menu and moves to the selected item (See figure 8). The mark is relative to the input and has a first and second end. The first end is where the user first made a menu selection and the second end is placed over the intended second selection by the user (See figure 10). Fitzmaurice teaches the menu items are highlighted when selected and show rollovers when the user places a cursor over them. Fitzmaurice additionally teaches displaying the menus in different colors or contrasts, which is a form of highlighting to the user. Fitzmaurice teaches a marker selection menu that will give a rotational effect on the interface as the user moves from selection to selection. For example, the user can select the center and then move to the east and before selecting they could move the stylus to the north position and the segment will rotate about the center input and then move to the north position (Fitzmaurice Figures 5-9 and Para 0037-0044). In the alternative, if the user selections from the mark are not reasonable considered then these limitations would have been obvious to one of ordinary skill in the art at the time if the invention, in view of Kurtenbach, because Kurtenbach teaches a process of displaying a combination radial and linear menu where the menus can be selected via stroke or gesture of a pen touching the display surface. Kurtenbach shows an example (See figure 3 and 4 and column 3, lines 37-67 and column 4, lines 1-10) where the user can press the pen against a surface and highlight a menu, when they move the pen in angular section 46. The menu item 42 is selected. Then the user can change direction and rotate the pen

and make a second selection stroke 50). Kurtenbach teaches the user can move the pen tip back to the center point 48 and draw another line to select another menu. In the Examiner opinion represents at least two ways to rotate a segment around a mark. The user can perform a stroke and then return to the mark and stroke again, each time turning the pen to go in another direction. Or, the user can perform a stroke. Kurtenbach shows that when a menu has a submenu then a new mark is made and the user continues from that new mark to select sub-menu items by rotating the pen. Clearly, stroke 50 is rotated approx. 45 degrees from stroke 42.

With respect to **dependent claim 18**, Fitzmaurice teaches the system wherein the render module displays a plurality of sub-selections based on the particular selection (Fitzmaurice Figures 5-9). Fitzmaurice displays a plurality of sub-selections corresponding to the first selection.

With respect to **dependent claim 19**, Fitzmaurice teaches the system wherein the input device is a pointing device (Para 0033).

With respect to **dependent claim 20**, Fitzmaurice teaches the system wherein the input device is a touch screen device (Para 0033).

With respect to **dependent claim 21**, Fitzmaurice teaches the system wherein the input detection module provides the input to the render module wherein the input rotates the segment over the plurality of selections (Fitzmaurice Para 0060).

In regard to **Independent claim 22**, claim 22 reflects the computer readable medium comprising computer readable instructions used for performing the method steps as claimed in claim 1 and is rejected along the same rationale.

With respect to **dependent claim 23**, as indicated in the above discussion, Fitzmaurice in

view of Kurtenbach teaches every element of claim 1.

Fitzmaurice does not expressly teaches the method wherein the highlighting the particular selection of the plurality of selections comprises enlarging a display of the particular selection relative to the other selections of the plurality of selections. However, this limitation would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Kurtenbach, because Kurtenbach teaches a process of expanding menu items (See figure 13 and column 8, lines 18-30) for the purposes of allowing the user to continually select menu items that were small and hard to determine when selection occurs. It is noted that the menu item in the callout 268, is enhanced or enlarged compared to items 256 and 258.

It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

Response to Arguments

Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments revolve around the amended features of the claims and as presented above a new ground of rejection has been applied to the amended claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date

of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. Theriault whose telephone number is (571) 272-5867. The examiner can normally be reached on M, W, F 10:00AM - 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


/Steven B Theriault/
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